

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
15 April 2004 (15.04.2004)

PCT

(10) International Publication Number
WO 2004/030615 A2

(51) International Patent Classification⁷: **A61K**

(21) International Application Number:
PCT/US2003/028547

(22) International Filing Date:
29 September 2003 (29.09.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/414,971 2 October 2002 (02.10.2002) US

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(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: COMPOSITIONS AND METHODS FOR THE DIAGNOSIS AND TREATMENT OF TUMOR

(57) Abstract: The present invention is directed to compositions of matter useful for the diagnosis and treatment of tumor in mammals and to methods of using those compositions of matter for the same.

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APPENDIX

RESULT 15

ABM81255

ID ABM81255 standard; protein; 1019 AA.

XX

AC ABM81255;

XX

DT 18-NOV-2004 (first entry)

XX

DE Tumour-associated antigenic target (TAT) polypeptide PRO81993, SEQ:3235.

XX

OS Homo sapiens.

XX

PN WO2004030615-A2.

XX

PD 15-APR-2004.

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PF 29-SEP-2003; 2003WO-US028547.

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PR 02-OCT-2002; 2002US-0414971P.

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PA (GETH) GENENTECH INC.

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PI Wu TD, Zhang Z, Zhou Y;

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DR WPI; 2004-347921/32.

DR N-PSDB; ACN39223.

XX

PT New tumor-associated antigenic target polypeptides and nucleic acids,
PT useful in preparing a medicament for treating or detecting a
PT proliferative disorder, e.g. breast, lung, colorectal, ovarian or
PT prostate cancer or tumor.

XX

PS Claim 12; SEQ ID NO 3235; 7273pp; English.

XX

CC The invention relates to human tumour-associated antigenic target (TAT)
CC polypeptides, and their related nucleic acids. The TAT polypeptides are
CC overexpressed in cancer tissues compared to normal tissues, and may thus
CC serve as effective targets for the diagnosis and treatment of cancer in
CC mammals. The invention also relates to nucleic acid and polypeptide
CC sequences at least 80% identical to the TAT nucleic acids and
CC polypeptides; expression vectors and host cells comprising a TAT nucleic
CC acid; an antibody specific for a TAT polypeptide; a peptide or organic
CC molecule which binds to a TAT polypeptide; fusion proteins comprising a
CC TAT polypeptide; and methods and compositions for the treatment or
CC diagnosis of cancer in mammals. TAT polypeptides, nucleic acids,
CC antibodies, antagonists, binding molecules and compositions are useful
CC for diagnosing or treating a cell proliferative disorder associated with
CC increased TAT expression, particularly cancers such as breast cancer,
CC colorectal cancer, lung cancer, ovarian cancer, liver cancer, bladder
CC cancer, pancreatic cancer, cervical cancer, cancers of the central
CC nervous system, melanoma and leukaemia. TAT nucleic acids may further be
CC used as hybridisation probes, in chromosome and gene mapping, in

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CC chromosome identification and in gene therapy. The present sequence
CC represents a TAT polypeptide of the invention

XX

SQ Sequence 1019 AA;

Query Match 85.2%; Score 5152; DB 8; Length 1019;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 992; Conservative 1; Mismatches 0; Indels 0; Gaps
0;

Qy	170	AAQELSQEIKAFLTGVDPILGHQLSAREHARCGLLLRLSLPPARAAVLDHLRGVFDESVR	229
		:	
Db	27	SAQELSQEIKAFLTGVDPILGHQLSAREHARCGLLLRLSLPPARAAVLDHLRGVFDESVR	86
Qy	230	AHLAALDETPVAGPPHLRPPPPSHVPAGGPGLEDVVQEVQQVLSEFIRANPKAWAPVISA	289
Db	87	AHLAALDETPVAGPPHLRPPPPSHVPAGGPGLEDVVQEVQQVLSEFIRANPKAWAPVISA	146
Qy	290	WSIDLMGQLSSTYSGQHQRVPHATGALNELLQLWMGCRATRTLMDIYVQCLSALIGSCPD	349
Db	147	WSIDLMGQLSSTYSGQHQRVPHATGALNELLQLWMGCRATRTLMDIYVQCLSALIGSCPD	206
Qy	350	ACVDALLDTSVQHSPHFDWVVAHIGSSFPGTIIISRVLSCGLKDFCVHGGAGGGAGSSGGS	409
Db	207	ACVDALLDTSVQHSPHFDWVVAHIGSSFPGTIIISRVLSCGLKDFCVHGGAGGGAGSSGGS	266
Qy	410	SSQTPSTDPFPGSPAIPAERVPKIASVVGILGHLASRHGDSIRRELLRMFHDSLGGSG	469
Db	267	SSQTPSTDPFPGSPAIPAERVPKIASVVGILGHLASRHGDSIRRELLRMFHDSLGGSG	326
Qy	470	GRSGDPSLQATVPFLLQLAVMSPALLGTVSGELVDCLKPPAVLSQLQQHLQGFPREELDN	529
Db	327	GRSGDPSLQATVPFLLQLAVMSPALLGTVSGELVDCLKPPAVLSQLQQHLQGFPREELDN	386
Qy	530	MLNLAVHLVSQASGAGAYRLLQFLVDTAMPASVITTQGLAVPDTVREACDRLIQLLLLHL	589
Db	387	MLNLAVHLVSQASGAGAYRLLQFLVDTAMPASVITTQGLAVPDTVREACDRLIQLLLLHL	446
Qy	590	QKLVHHRGGSPGEGVLGPPPPRLVPFLDALKNHVGELCGETRLRLERKRFLWQHQLLGLL	649
Db	447	QKLVHHRGGSPGEGVLGPPPPRLVPFLDALKNHVGELCGETRLRLERKRFLWQHQLLGLL	506
Qy	650	SVYTRPSCGPEALGHLLSRARSPEELSLATQLYAGLVVSLSGLLPLAFRSCLARVHAGTL	709
Db	507	SVYTRPSCGPEALGHLLSRARSPEELSLATQLYAGLVVSLSGLLPLAFRSCLARVHAGTL	566
Qy	710	QPPFTARFLRNLALLVGWEQQGGEGPAALGAHFGESASAHLSDLAPLLHPEEEVAEAAA	769
Db	567	QPPFTARFLRNLALLVGWEQQGGEGPAALGAHFGESASAHLSDLAPLLHPEEEVAEAAA	626
Qy	770	SLLAICFPFSEALSPSQLLGLVRAGVHRFFASLRLHGPPGVASACQLLTRLSQTSPAGLK	829
Db	627	SLLAICFPFSEALSPSQLLGLVRAGVHRFFASLRLHGPPGVASACQLLTRLSQTSPAGLK	686

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Qy	830	AVLQLLVEGALHRGNTLFGGQVDGDNETLSVVSASLASASLLDTNRRHTAAVPGPGGIW	889
Db	687	AVLQLLVEGALHRGNTLFGGQVDGDNETLSVVSASLASASLLDTNRRHTAAVPGPGGIW	746
Qy	890	SVFHAGVIGRGLKPPKFVQSRNQOEVIYNTQSLLSLLVHCCSAPGGTECGECWGAPILSP	949
Db	747	SVFHAGVIGRGLKPPKFVQSRNQOEVIYNTQSLLSLLVHCCSAPGGTECGECWGAPILSP	806
Qy	950	EAAKAVAVTLVESVCPDAAGAEELAWPPEEHARATVERDLRIGRRFREQPLLFELLKLVA	1009
Db	807	EAAKAVAVTLVESVCPDAAGAEELAWPPEEHARATVERDLRIGRRFREQPLLFELLKLVA	866
Qy	1010	APPALCYCSVLLRGLLAALLGHWEASRHPDTHSPWHLEASCTLVAVMAEGSLLPPALGN	1069
Db	867	APPALCYCSVLLRGLLAALLGHWEASRHPDTHSPWHLEASCTLVAVMAEGSLLPPALGN	926
Qy	1070	MHEVFSQLAPFEVRLLLLSVWGFLREHGPLPQKFIFQSERGRFIRDFSREGGGEGGPHLA	1129
Db	927	MHEVFSQLAPFEVRLLLLSVWGFLREHGPLPQKFIFQSERGRFIRDFSREGGGEGGPHLA	986
Qy	1130	VLHSLVLRNIDRLGLFSGRFQAPSPSTLLRQGT	1162
Db	987	VLHSLVLRNIDRLGLFSGRFQAPSPSTLLRQGT	1019

3508/6881
FIGURE 3235

MSALCDPPGAPGPPGPAPATHGPAPLSAQELSQEIKAFITGVDPILGHQLSAREHARCGLLLLRSLPPARAVALD
HLRGVFDESVRHLAALDETPVAGPPHLRPPPPSHVPAGGPGLEDVVQEVQQVLSEFIRANPKAWAPVISAWSID
LMGQLSSTYSGQHQRVPHATGALNELLQLWMGCRATRTLMDIYVQCLSALIGSCPDACVDALLDTSVQHSPHFDW
VVAHIGSSFPGTIISRVLSCGLKDFCVHGGAGGGAGSSGGSSSQTPSTDFFPGSPAIPAERKVPKIASVVGILGH
LASRHGDSIRRELLRMFHDLAGGSGGRSGDPSLQATVPFLLQLAVMSPALLGTVSGELVDCLKPPAVLSQLQQH
LQGFPREELDNMLNLAVHLVSQASGAGAYRLLQFLVDTAMPASVITTQGLAVPDTVREACDRLIQLLLLHLQKLV
HHRGGSPGEGVLQPPPPRLVPFLDALKNHVGELCGETLRERKRFLWQHQLLGLLSVYTRPSCGPEALGHLLSR
ARSPEELSLATQLYAGLVVSLGLLPLAFRSCLARVHAGTLQPPFTARFLRNLALLVGWEQQGGEGPAALGAHFG
ESASAHLSDLAPLLLHPREEVAEAAAASLLAICPPFSEALSPSOLLGLVRAGVHRFFASRLRHGPPGVASACQLLT
RLSQTSPAGLKAVLQLLVEGALHRGNTELFGGQVDGNETLSVVSASLASASLLDTNRRHTAAMPGGGIWSVFH
AGVIGRGLKPPKFVQSRNQEQEVIYNTQSLLSLLVHCCSAPGGTECGECWGAPILSPEAAKAVAVTLVESVCPDAA
GAELAWPPEEHARATVERDLRIGRRFREQPLLFELLKLVAAPPALCYCSVLLRGLLAALLGHWEASRHPDTTHS
PWHLEASCTLVAVMAEGSLLPPALGNMHEVFSQLAPFEVRLLLLSVWGFLREHGPLPQKFIQSERGRFIRDFSR
EGGEGGGPHLAVLHSLVLRNIDRLGLFSGRFQAPSPSTLLRQGT